

SEQUENCE LISTING

<110> THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
 AURORA BIOSCIENCES CORPORATION
 TSIEN, Roger
 HEIM, Roger
 CUBITT, Andrew

<120> TANDEM FLUORESCENT PROTEIN CONSTRUCTS

<130> REGEN1260-3

<150> US 08/792,553

<151> 1997-01-31

<150> US 09/396,003

<151> 1999-09-13

<160> 31

<170> PatentIn version 3.1

<210> 1

<211> 716

<212> DNA

<213> Aequorea victoria

<220>

<221> CDS

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<223>

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Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val	
1 5 10 15	
gaa tta gat ggt gat gtt aat ggg cac aaa ttt tct gtc agt gga gag	96
Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu	
20 25 30	
ggt gaa ggt gat gca aca tac gga aaa ctt acc ctt aaa ttt att tgc	144
Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys	
35 40 45	
act act gga aaa cta cct gtt cca tgg cca aca ctt gtc act act ttc	192
Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe	
50 55 60	
tct tat ggt gtt caa tgc ttt tca aga tac cca gat cat atg aaa cgg	240
Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg	
65 70 75 80	
cat gac ttt ttc aag agt gcc atg ccc gaa ggt tat gta cag gaa aga	288
His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg	
85 90 95	
act ata ttt ttc aaa gat gac ggg aac tac aag aca cgt gct gaa gtc	336
Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val	
100 105 110	
aag ttt gaa ggt gat acc ctt gtt aat aga atc gag tta aaa ggt att	384

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Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile .
 115 120 125
 gat ttt aaa gaa gat gga aac att ctt gga cac aaa ttg gaa tac aac 432
 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
 130 135 140
 tat aac tca cac aat gta tac atc atg gca gac aaa caa aag aat gga 480
 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
 145 150 155 160
 atc aaa gtt aac ttc aaa att aga cac aac att gaa gat gga agc gtt 528
 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
 165 170 175
 caa cta gca gac cat tat caa caa aat act cca att ggc gat ggc cct 576
 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
 180 185 190
 gtc ctt tta cca gac aac cat tac ctg tcc aca caa tct gcc ctt tcg 624
 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
 195 200 205
 aaa gat ccc aac gaa aag aga gac cac atg gtc ctt ctt gag ttt gta 672
 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
 210 215 220
 aca gct gct ggg att aca cat ggc atg gat gaa cta tac aaa ta 716
 Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
 225 230 235
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 <213> Aequorea victoria
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 Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
 1 5 10 15
 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
 20 25 30
 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
 35 40 45
 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe
 50 55 60
 Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
 65 70 75 80
 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
 85 90 95

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Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
 100 105 110

Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
 115 120 125

Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
 130 135 140

Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
 145 150 155 160

Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
 165 170 175

Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
 180 185 190

Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
 195 200 205

Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
 210 215 220

Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
 225 230 235

<210> 3
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<220>
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<400> 3

Ser Gln Asn Tyr Pro Ile Val Gly
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<210> 4
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Lys Ala Arg Val Leu Ala Glu Ala Met Ser
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<400> 5

Pro Ser Pro Arg Glu Gly Lys Arg Ser Tyr
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Tyr Val Ala Asp Gly
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Met Phe Gly Gly Ala Lys Lys Arg
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Gly Val Val Asn Ala Ser Ser Arg Leu Ala
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<210> 9
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Leu Ile Ala Tyr Leu Lys Lys Ala Thr
 1 5

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Val Lys Met Asp Ala Glu Phe
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<210> 11
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<400> 11

Phe Leu Ala Glu Gly Gly Gly Val Arg Gly Pro Arg Val Val Glu Arg
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His

<210> 12
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<220>
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<400> 12

Asp Arg Val Tyr Ile His Pro Phe His Leu Val Ile His
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<210> 13

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<211> 8
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<220>
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<400> 13

Lys Pro Ala Leu Phe Phe Arg Leu
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<210> 14
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<220>
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<400> 14

Gln Pro Leu Gly Gln Thr Ser Leu Met Lys Arg Pro Pro Gly Phe Ser
 1 5 10 15

Pro Phe Arg Ser Val Gln Val Met Lys Thr Gln Glu Gly Ser
 20 25 30

<210> 15
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<400> 15

Gly Gly Gly Gly Ser
 1 5

<210> 16
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<220>
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<400> 16

Gly Gly Gly Gly Gly Gly Ser Met Phe Gly Gly Ala Lys Lys Arg Ser
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Gly Gly Gly Gly Gly Gly
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<210> 17
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<220>
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<400> 17

Ile Gln Arg Met Lys Gln Leu Glu Asp Lys Val Glu Glu Leu Leu Ser
 1 5 10 15

Lys Asn Tyr His Leu Glu Asn Glu Val Ala Arg Leu Lys Lys Leu Val
 20 25 30

Gly Glu Arg
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<210> 18
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<220>
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<400> 18

Ser Lys Val Ile Leu Phe
 1 5

<210> 19
 <211> 22
 <212> DNA
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<220>
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<400> 19
 ggatccccc gctgaattca tg

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<210> 20
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<400> 20
 aaataataag gatcc

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<210> 21
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<220>
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<400> 21
 ggtaagcttt tatttgata gttcatccat gcc

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<220>
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<400> 22
 agaaaggcta gcaaaggaga agaa

24

<210> 23
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 <212> DNA
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<400> 23
 tcagtctaga tttgtatagt tcatc

25

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Met Arg Gly Ser His His His His His His
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<210> 25
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<400> 25

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Ser Ser Met Thr Gly Gly Gln Gln Met Gly Arg Asp Leu Tyr Asp Asp
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Asp Asp Lys Asp Pro Pro Ala Glu Phe
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<210> 26
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<400> 26

Ala Asn Pro Leu Tyr Lys Asp Ala Thr Asp Phe Thr
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<210> 27
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<400> 27

Thr Ala Asn Pro Leu Tyr Lys Asp Ala Thr Ser Asp Phe Thr
 1 5 10

<210> 28
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<400> 28

Gly Thr Ala Asn Pro Leu Tyr Lys Asp Ala Thr Ser Gly Asp Phe Thr
 1 5 10 15

<210> 29
 <211> 18
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<220>
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<400> 29

Gly Thr Ala Asn Pro Leu Tyr Lys Asp Ala Thr Ser Gly Ser Thr Asp

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15

Phe Thr

<210> 30
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<220>
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<400> 30

Gly Thr Ala Asn Pro Leu Tyr Lys Asp Ala Thr Ser Gly Ser Thr Gly
1 5 10 15

Ser Asp Phe Thr
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<210> 31
<211> 22
<212> PRT
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<220>
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<400> 31

Gly Thr Ala Asn Pro Leu Tyr Lys Asp Ala Thr Ser Gly Ser Thr Gly
1 5 10 15

Ser Gly Ser Asp Phe Thr
20

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